Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
1998 Biennial Regulatory Review --	)	CC Docket No. 98-163
Modifications to Signal Power	)	
Limitations Contained in Part 68	)	
Of the Commission's Rules	)	

COMMENTS OF AMERITECH

Ameritech submits these comments in response to the Commission's Notice of Proposed Rulemaking in the above-captioned matter.[1] In the NPRM, the Commission proposes to increase its limit on the amount of signal power that can be transmitted over telephone lines, from -12dBm to -6dBm. Ameritech strongly recommends that the Commission not adopt this rule change until proper testing is completed and the full potential impact of the change is known.

The Commission proposes this change on the belief that it will increase the ability of pulse code modulation ("PCM") -- or V.90 -- modems to realize their transmission capability of up to 56kbps.[2] The Commission states that it appears that, with current signal power limitations, these modems may be capable of achieving transmission speeds of only 53 or 54kbps.[3] It is the Commission's belief that there will be no harmful effects on the network or its users because of

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[1] *In the Matter of 1998 Biennial Regulatory Review -- Modification to Signal Power Limitations Contained in Part 68 of the Commission's Rules,* CC Docket No. 98-163, Notice of Proposed Rulemaking, FCC 98-122 (released September 16, 1998) ("NPRM").

[2] *Id.* at ¶7.

[3] *Id.* at ¶6.

the widespread use of digital, rather than the frequency division multiplexing ("FDM") analog, transmission systems that the original signal power limit was designed to protect.[4] However, the actual effects of such a change cannot be known until appropriate testing has taken place.

In light of the Commission's desire, however, to improve transmission rates for consumers using high speed digital information technologies -- like 56kbps modems -- Ameritech recommends that this proceeding be suspended temporarily until the industry completes appropriate testing. Preliminary efforts are already underway in that regard. The American National Standard Institute ("ANSI") Committee T1 standards organization is developing documents which will identify types of testing that can be performed as well as overall requirements for spectrum management. The Committee T1A1.7 has just completed its initial letter ballot process (LB 711) on its "Technical Report on V.90 Testing" which will address issues of crosstalk and increasing the noise floor for services within a common cable. The testing should also take into consideration ANSI's recently published standard T1.413-1998 "Network and Customer Installation Interfaces -- Asymmetric Digital Subscriber Line ("ADSL") Metallic Interface." This standard provides for a power spectral density ("PSD") mask for system power computability and extends down to the V.90 voiceband. In addition, T1E1.4 plans to draft an ANSI standard on spectrum management -- to be completed by the end of 1999 -- which will provide general guidance for PSD signatures for compatibility with other services in existing cables. This standard, coupled with the V.90 test results, should indicate whether increasing the power allowance for the V.90 technology in the 0-4 kHz spectrum will pose a danger of "harm" to the network.

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[4] *Id.* at note 17 and ¶7.

This temporary delay will also allow local exchange carriers to properly review their respective state commissions' service quality requirements and gauge what effects this modification would have -- *e.g.*, by way of levels of noise and loss within voice grade service -- on those requirements. Unfortunately, modem manufacturers may be either unaware or simply unconcerned with state commissions' service quality requirements for voice grade services. For example, General DataComm, Inc., noted in its "Analysis of -12dBm Power Limit" dated July, 1997,[5] under "Crosstalk Analysis":

> The only other services that this spectrum might interfere with are other voiceband services. Any perceptible crosstalk to another channel would appear as an increase in the noise floor, not as single-frequency interference or "intelligible" crosstalk.

Obviously, whether crosstalk is "intelligible" is somewhat irrelevant if the noise level is high enough to interfere with conversations or even simply annoy the parties.

Upon completion of V.90 testing, if no harms are found, the Commission should modify the rule for this modem technology only. V.90's unique "spread spectrum" characteristics are designed so as not to impact existing voiceband services. It utilizes filters to reduce higher frequency interference. However, other technologies may not have these "protective" features. With a quadrupling of the power output limits, other technologies could cause major problems with other POTS customers, as well as with higher level services within a cable.

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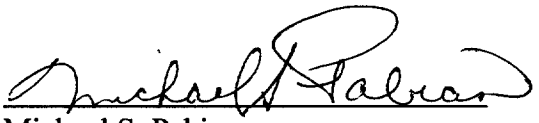
[5] General DataComm, Inc.'s, "Analysis of -12dBm Power Limit," ITU-T contribution PMC'97-029, for Study Group 16 Question 23, V.pcm Rapporteur Meeting dated July 7-11, 1997.

Ameritech strongly believes that these recommendations are in the best interest of the network and will minimize any potential risk of harm, and are in the best interest of customers and will minimize customer complaints and concerns of interference or noise.

Respectfully submitted,



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